

WE CLAIM:

1. A portable camera including:
 - 5 (a) digital image capture device for the capturing of digital images;
 - (b) an inbuilt printer device;
 - (c) a programming language interpreter internally connected to said digital image capture device for the manipulation of a digital image captured by said capture device;
 - (d) a script input means for inputting a self documenting program script for the manipulation and filtering of
 - 10 said captured digital image to produce visual alterations thereof, said script input means including a card reader for optically reading a script printed as an array of dots on one surface of a portable card;
 - (e) a display;

wherein said script is interpreted and executed by said interpreter means to modify a captured digital image in accordance with said script to produce a digital image modified from said captured digital image, wherein said

- 15 display is adapted to display said modified image, and wherein said printer device is adapted to print said modified image.
- 2. A portable camera as claimed in claim 1 wherein said card has, on said one surface, a fault tolerant encoded form of the said script.
- 3. A portable camera claimed in claim 2 wherein said programming language includes a language construct
- 20 for implementing image warping.
- 4. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing convolution.
- 5. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing color lookup tables.
- 25 6. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing posterising images.
- 7. A portable camera claimed in claim 2 wherein said programming language includes a language construct for adding noises to images.
- 8. A portable camera claimed in claim 2 wherein said programming language includes a language construct
- 30 for implementing image enhancement.
- 9. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing image painting algorithms including brush jittering and tiling.
- 10. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing edge detection.
- 35 11. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing image illumination.
- 12. A portable camera claimed in claim 2 wherein said programming language includes a language construct

for implementing text and fonts.

13. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing face detection.
14. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing the utilisation of arbitrary complexity pre-rendered graphical objects.